

1. (Currently Amended) A method of affecting thermoacoustic oscillations in a combustion system ~~(1) comprising having~~ at least one burner ~~(2)~~ and at least one combustor ~~(3)~~, ~~modulated injection of fuel being carried out, characterized in that the method comprising:~~
modulating fuel ~~modulated injection of the fuel is carried out~~ into a recirculation zone ~~(7)~~ which forms in the combustor ~~(3)~~.

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that the injection of wherein~~ the total quantity of fuel injection comprises a first quantity and a second quantity, is carried out in such a way that a and comprising:
injecting the first quantity of fuel is injected at a constant rate; and
injecting a the second quantity of fuel is injected in a modulated manner.

3. (Currently Amended) The method as claimed in claim 2, ~~characterized in that wherein~~ the second quantity of fuel ~~injected in a modulated manner~~ is smaller than the first quantity of fuel ~~injected at a constant rate~~.

4. (Currently Amended) The method as claimed in claim 2 ~~or 3, characterized in that wherein~~ the second quantity of fuel ~~injected in a modulated manner~~ is approximately between 6% and 1% of the total quantity of fuel.

5. (Currently Amended) The method as claimed in ~~one of claims 1 to 4~~ Claim 1, ~~characterized in that the modulated wherein said modulating fuel injection of the fuel is carried out performed~~ independently of an oscillation phase of the thermoacoustic oscillations.

6. (Currently Amended) The method as claimed in ~~one of claims 1 to 4~~ Claim 1, ~~characterized in that the modulated wherein said modulating fuel injection of the fuel is coupled~~ to an oscillation phase of the thermoacoustic oscillations.

7. (Currently Amended) The method as claimed in ~~one of claims 1 to 6~~ Claim 1,

~~characterized in that the modulated~~ said modulating fuel injection of the fuel is carried out performed exclusively into the recirculation zone (7).

8. (Currently Amended) The method as claimed in ~~one of claims 1 to 7~~ Claim 1, ~~characterized in that the wherein said injection of fuel into the recirculation zone (7) is carried out performed exclusively in a modulated manner.~~

9. (Currently Amended) A device for affecting thermoacoustic oscillations in a combustion system ~~(1) comprising:~~
_____ ~~at least one burner (2) and at least one combustor (3), the burner (2) having at least one fuel supply device (11) with at least one fuel valve (24) useful for producing modulated injection of the fuel, characterized in that:~~
_____ wherein the fuel supply device (11) has at least one lance (12) projecting into the burner (2) for the modulated injection of the fuel into a recirculation zone (7) that forms in the combustor (3).

10. (Currently Amended) The device as claimed in claim 9, ~~characterized in that wherein the lance (12) is arranged coaxially with respect to a longitudinal mid-axis (20) of the burner (2).~~

11. (Currently Amended) The device as claimed in claim 9 ~~or 10, characterized in that wherein the lance (12) injects is configured and arranged to inject the fuel into the recirculation zone (7) substantially axially.~~

12. (Currently Amended) The device as claimed in ~~one of claims 9 to 11~~ Claim 9, ~~characterized in that further comprising:~~
_____ a control system (23) for actuating configured and arranged to actuate the fuel valve (24) controlling the fuel supply of the lance, (12) has the control system having an open control loop which contains a control signal generator (26) which generates configured and arranged to

generate a control signal for actuating the fuel valve (24) independently of the current thermoacoustic oscillations.

13. (Currently Amended) The device as claimed in claim 12, ~~characterized in that wherein the open control loop contains~~ comprises a signal amplifier (27) which passes on the control signal generated by the signal generator (26) in amplified form to the fuel valve (24).

14. (Currently Amended) The device as claimed in ~~one of claims 9 to 11~~ Claim 9, ~~characterized in that further comprising:~~
_____ a control system (28) for actuating configured and arranged to actuate the fuel valve (24) controlling the fuel supply of the lance, (12) ~~has the control system having~~ a closed control loop which contains a control signal generator (29) which generates a control signal for actuating the fuel valve (24) as a function of an oscillation signal correlating with the current thermoacoustic oscillations.

15. (Currently Amended) The device as claimed in claim 14, ~~characterized in that wherein the closed control loop contains~~ comprises an element selected from the group consisting of sensors for generating the oscillation signal, ~~and/or~~ a filter (30) for noise suppression in the control signal, ~~and/or~~ a time delay element (31) for the phase shifting of the control signal, ~~and/or~~ a signal amplifier (32) for amplifying the control signal before it passes to the fuel valve (24), and combinations thereof.